Figure 1: Comparison of the narGHJI promotor of *M. tuberculosis* (TB), *M. bovis (bovis)* and *M. bovis* BCG (BCG)

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    ACGATATTGCGTTGAACGGCACGACGACGCTGCGGGCCTATCGCGTGCATCTGCTTGGCGGCGAACCGCGTGCGCGTGACCACCGGGC
             10        20        30        40        50        60        70        80         TB
1   ........................................................................................  Bovis
1   ........................................................................................  BCG
1   ........................................................................................

    GCTGTGCTGGGTGACGGCGGCCGAACTGCACGATGTCGACTGGGTACCAGCCGACCGCGGCTGGATTGCGGACCTGGCGCGAACCCTC
     90       100       110       120       130       140       150       160       170       TB
89  ........................................................................................  Bovis
89  ........................................................................................  BCG
89  ........................................................................................

    AACGGGTCCGCCGCAGATGTCCACCGTCGCTGTTAGGAAACCGACGGTGTGGTTGACGGTGGCCGCCGTCAACTTGGTTAGAACAACG
       180       190       200       210       220       230       240       250       260    TB
177 ........................................................................................  Bovis
177 ........................................................................................  BCG
177 ........................................................................................

    TGACAAAACGTTAACTTGGGTTTGCATGCCCGTAGCGATCACGATGGTTTTCTGGACGCGTGGCGACAACTTCCGGGCAGGACGCTGA
        270       280       290       300       310       320       330       340       350   TB
265 .......................................T................................................  Bovis
265 ........................................................................................  BCG
265 ........................................................................................

    CGCCCATCCATCGAGATACCCGATGTTGACGAGAGGGGTCCCCGACCCGGCGGACCGGGGCTTGACGGGCGCAATGCGGCGCGGCCGG
         360       370       380       390       400       410       420       430       440  TB
353 ........................................................................................  Bovis
353 ........................................................................................  BCG
353 ........................................................................................
                                                                                      →
    CCAGCCCGTAACGTCCAGCGAGTGCGGTCGCGCGCCGACGGCCCGGCCCCACACCGCTCATGACGAGGAGGTCATCCCGTGACC
          450       460       470       480       490       500       510       520           TB
441 ....................................................................................      Bovis
441 ....................................................................................      BCG
441 ....................................................................................
```

Replacement sheet

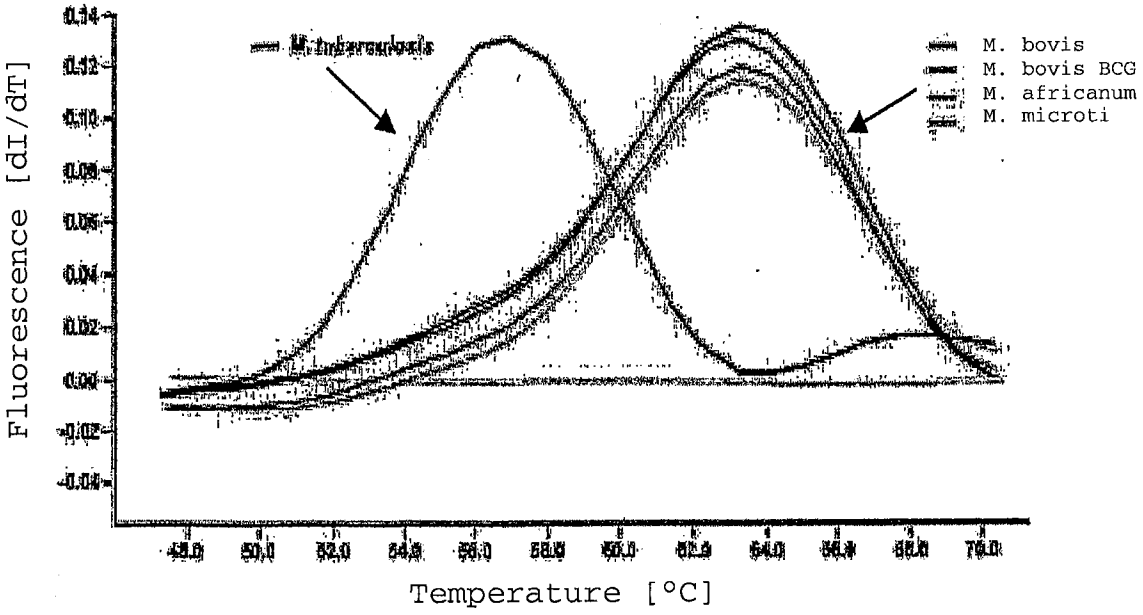

Figure 2

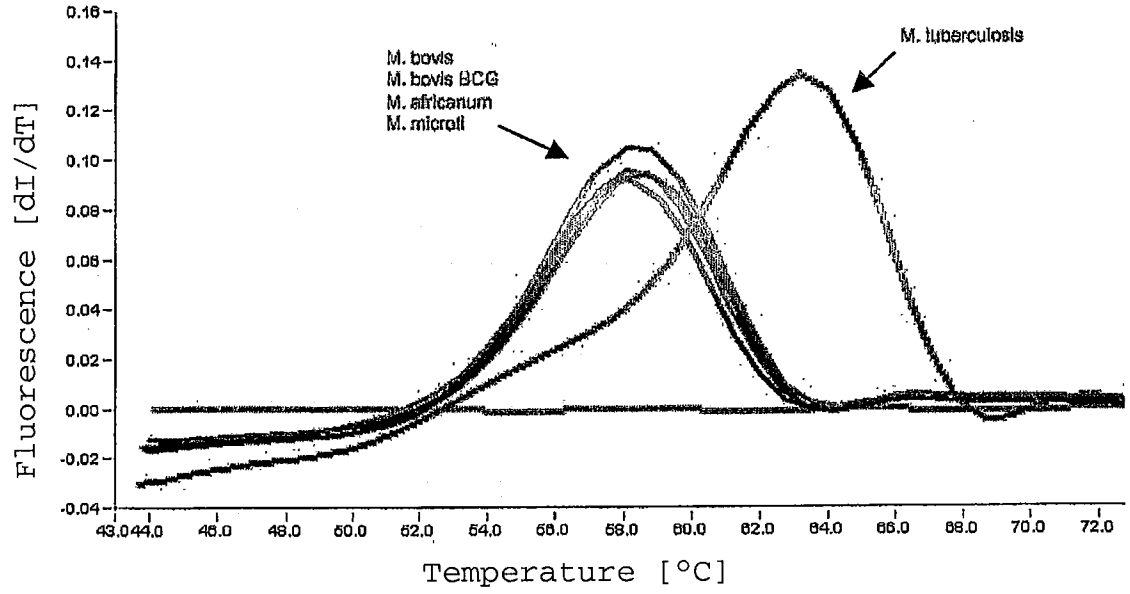

Figure 3

Replacement sheet

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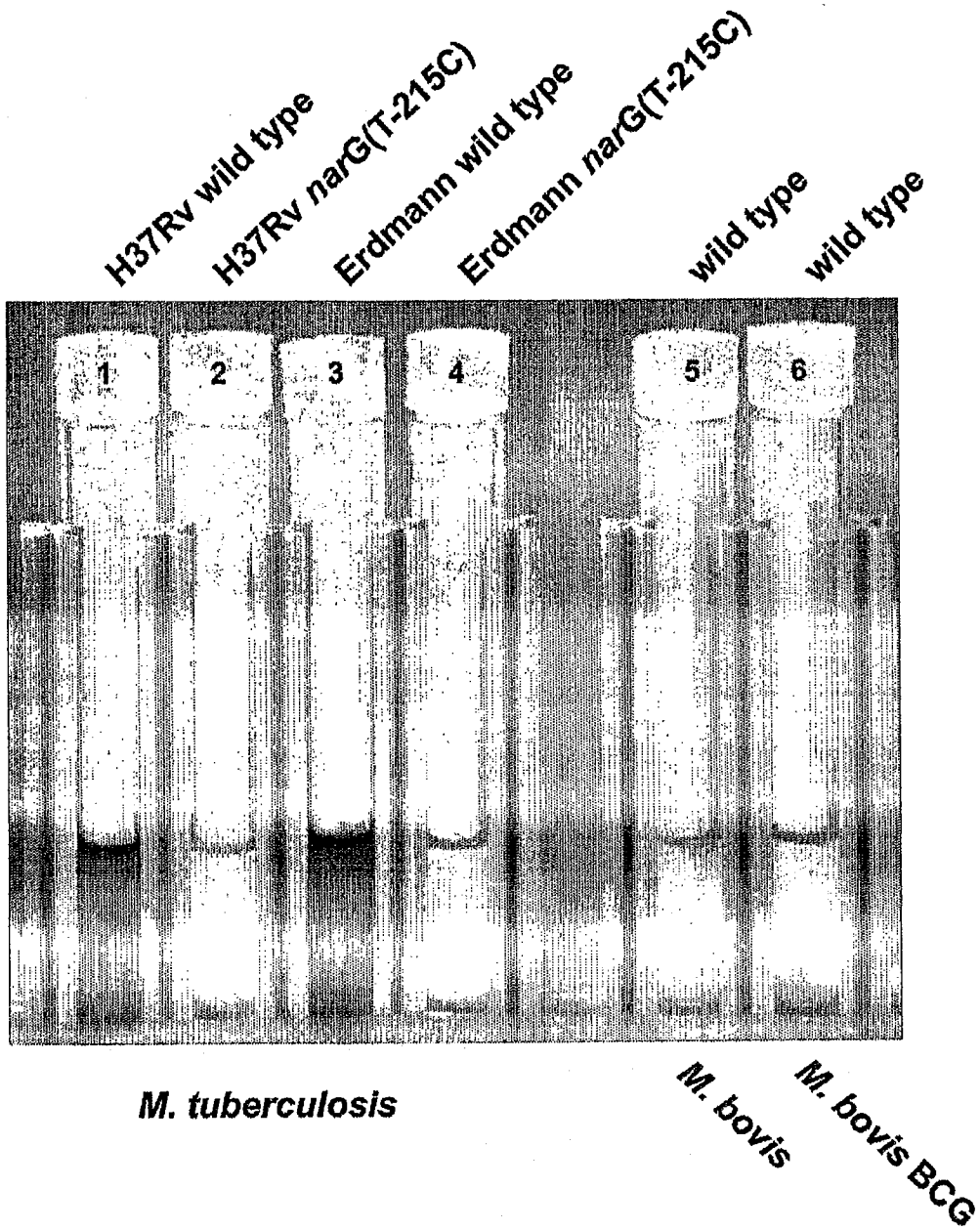
Figure 4: nitrate reductase assay: *M. tuberculosis* wild type and mutants, *M. bovis* and *M. bovis* BCG in comparison



Replacement sheet

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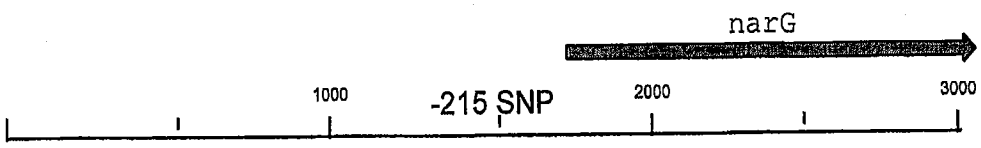
Figure 5: -215 SNP with 150 bp flanking sequences



1500 bases upstream and downstream of the -215 SNP ("T") in the promotor of the narGHJI operon:

CTCGGGTGTCAAGTTGACGCCGGCGATTACCGCTGTCTACCTCGTCGGCGTTCGGCGGTT 60
GCATGCGGCCGCATTTTCGGTGGTCGTGTTCCTTGCCACCGTCGGCGTGTCGCTACTGGT 120
CGTCGGCGATGAAGCCCGCTACTACTTCACCGACCTGTTGGGCGACGCAGGCCGGGTTGG 180
GCCCATCGCCACCTCCTTCAATCAATCCTGGCGCGGCGCGATTTCCCGGATTCTCGGTCA 240
CGACGCCGGTTTTGGTCCGCTGGTTCTGGCTGCGATCGCCAGTACGGCGGTATTGGCCAT 300
CCTGGCCTGGCGTGCGCTCGACAGGTCCGATCGGCTGGGCAAACTATTGGTGGTCGAGTT 360
GTTCGGCCTGCTGCTCTCGCCGATCTCCTGGACTCACCACTGGGTGTGGCTAGTGCCGCT 420
GATGATCTGGCTGATTGACGGGCCAGCGCGTGAGCGCCCGGGCGCCCGGATTTTGGGCTG 480
GGGCTGGTTGGTGTTGACCATCGTCGGCGTGCCGTGGTTGCTGAGCTTTGCTCAACCGAG 540
CATCTGGCAAATCGGCCGGCCGTGGTATTTGGCCTGGGCCGGTCTGGTCTACGTGGTGGC 600
GACGCTGGCGACCTTGGGCTGGATCGCCGCCTCCGAGCGTTACGTGCGCATTCGGCCGCG 660
GCGCATGGCCAATTAGGCCCCAAACATTGCGTCGATATCGTGCGCCATCGCAATGTCGTT 720
TTCCGTGATACCACCTACCGCATGCGTAACCAGCGCGAAAGTTACTGTTCGCCAACGGAT 780
ATCGATGTCCGGATGATGATTTACCTCCTCGGCTCGCTCGGCCACCCGGCGTACGGCGTC 840
GATACCGGCCATAAACGTCGGAAACTTGATTGACCTACGCAGGACACCACCGGCGCGCTG 900
CCAGCCGTTGAGGTCGTGCAGTGCGGCGTCGACCTGCTCATCCGTTAACACAGCCATACC 960
TCGACGGTATACCGTCACAGGTCATGCTGAATCAGATCGTGGTTGCCGGAGCCATCGTCC 1020
GCGGTTGCACGGTCTTGGTGGCGCAACGCGTTCGGCCACCGGAGTTGGCGGGTCGTTGGG 1080
AACTTCCCGGCGGTAAGGTCGCCGCCGGCGAAACCGAGCGCGCCGCGCTGGCCCGAGAGC 1140
TCGCCGAAGAACTGGGACTCGAGGTCGCCGACCTCGCGGTGGGCGACCGTGTGGGCGACG 1200
ATATTGCGTTGAACGGCACGACGACGCTGCGGGCCTATCGCGTGCATCTGCTTGGCGGCG 1260
AACCGCGTGCGCGTGACCACCGGGCGCTGTGCTGGGTGACGGCGGCCGAACTGCACGATG 1320
TCGACTGGGTACCAGCCGACCGCGGCTGGATTGCGGACCTGGCGCGAACCCTCAACGGGT 1380
CCGCCGCAGATGTCCACCGTCGCTGTTAGGAAACCGACGGTGTGGTTGACGGTGGCCGCC 1440
GTCAACTTGGTTAGAACAACGTGACAAAACGTTAACTTGGGTTTGCATGCCCGTAGCGAT 1500
TACGATGGTTTTCTGGACGCGTGGCGACAACTTCCGGGCAGGACGCTGACGCCCATCCAT 1560
CGAGATACCCGATGTTGACGAGAGGGGTCCCCGACCCGGCGGACCGGGGCTTGACGGGCG 1620
CAATGCGGCGCGGCCGGCCAGCCCGTAACGTCCAGCGAGTGCGGTCGCGCGCCGACGGCC 1680
CGGCCCCACACCGCTCATGACGAGGAGGGTCATCCCGTGACCGTTACACCTCACGTCGGT 1740
GGACCGCTCGAAGAGCTGCTGGAGCGCAGCGGGCGCTTCTTCACCCCAGGTGAGTTCTCG 1800
GCCGACCTGCGCACCGTAACCCGGCGCGGCGGCCGCGAAGGTGACGTGTTCTACCGCGAT 1860
CGGTGGAGTCACGACAAAGTGGTCCGATCCACGCACGGAGTCAACTGCACCGGATCCTGC 1920
TCATGGAAGATCTACGTCAAAGACGGGATCATCACCTGGGAAACCCAGCAGACCGACTAC 1980
CCGTCGGTGGGCCCGGACCGGCCCGAATACGAGCCACGAGGTTGTCCCCGTGGCGCGTCG 2040
TTCTCCTGGTACAGCTATTCGCCGACGCGGGTGCGCTATCCGTATGCCCGGGGCGTGCTG 2100
GTTGAGATGTACCGGGAAGCCAAGACCCGCCTGGGCGACCCGGTGCTGGCGTGGGCCGAC 2160
ATTCAGGCGGATCCCGAGCGCAGACGCCGCTATCAACAGGCCCGCGGCAAGGGTGGGCTG 2220
GTCCGGGTGAGCTGGGCCGAGGCCAGCGAGATGGTGGCCGCCGCCCACGTGCACACCATC 2280
AAGACATACGGCCCGGACCGGGTCGCCGGCTTCTCGCCGATTCCGGCGATGTCAATGGTC 2340
AGCCATGCCGCGGGGTCCCGGTTCGTGGAGCTGATCGGCGGCGTGATGACGTCGTTCTAC 2400
GACTGGTACGCCGACTTGCCGGTGGCCTCGCCGCAGGTGTTCGGCGACCAGACCGACGTG 2460
CCCGAATCCGGCGACTGGTGGGATGCGTCGTATTTGGTCATGTGGGGCTCCAACGTCCCG 2520
ATCACCCGGACGCCCGACGCACATTGGATGGCGGAGGCCCGTTACCGCGGCGCTAAAGTC 2580
GTTGTCGTCAGCCCGGACTACGCCGACAACACCAAGTTCGCCGACGAGTGGGTGCGGTGC 2640
GCCGCCGGTACCGATACCGCGCTGGCGATGGCGATGGGCCACGTGATCCTGTCGGAATGT 2700
TACGTCCGTAACCAGGTTCCGTTCTTTGTCGACTATGTGCGCCGCTACACCGACCTGCCG 2760
TTTTTGATCAAGTTGGAAAAGCGGGGCGACCTGCTGGTTCCCGGAAAGTTCTTGACCGCG 2820
GCCGACATTGGTGAAGAAAGTGAGAACGCGGCGTTCAAACCCGCCCTGCTGGATGAGCTT 2880
ACGAATACCGTTGTCGTGCCGCAGGGCTCACTGGGATTCCGTTTCGGTGAGGACGGTGTT 2940
GGGAAGTGGAACCTGGACCTGGGTTCGGTGGTGCCGGCGCTAAGTGTGGAGATGGACAAG 3000
GC